

SUBSTITUTE SPECIFICATION*

FIELD OF THE INVENTION

[0001] The invention relates to ammunition for firearms and pneumatic smooth-bore weapons and can be used for producing bullets for cartridges for hunting and sporting guns.

BACKGROUND ART

[0002] An arrow-shaped bullet is known in the conventional art. This bullet is produced from a solid bar, the front part of which is tapered and the rear part of which is deformed to create an aerodynamic empennage (tail section) in the shape of longitudinal surfaces (see U.S. Pat. No. 3,846,878, published on Nov. 12, 1974).

[0003] The disadvantage of the method for producing such a bullet is its high manufacturing complexity.

[0004] Another method for producing an arrow-shaped bullet is known in the conventional art, see U.S. Pat. No. 5,515,785, published on May 14, 1996. This method deforms the rear part of a tubular blank to create an aerodynamic empennage (tail section) and insert a functional filling (core) in the tube's cavity. The rear part of a tubular blank is deformed by inelastic deformation (plastic flow) of the tube's material, and the thickness of the tube's walls is altered.

[0005] After the empennage is formed, a core is inserted in the tube's cavity. A core can have a granular or jelly filling, e.g., a load released at the moment the bullet hits the target. This core is kept in the tube's cavity by friction or capillary forces. This method is not used for inserting solid cores, e.g., metal cores.

[0006] The disadvantage of this method is its high manufacturing complexity. Also, a bullet produced by this method cannot be used for commercial or sport hunting.

[0007] A cartridge comprising a shell having means for inflammation (a primer), a propelling charge, a damage agent, and one or more wads is

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also known in the conventional art (see U.S. Pat. No. 5,239,928, published on Aug. 31, 1993). The drawback of this cartridge is that it is not possible to use arrow-shaped bullets.

BRIEF DESCRIPTION OF THE DRAWINGS

[0008] FIG. 1 illustrates a method for producing a bullet according to the claimed method.

[0009] FIG. 2 illustrates a method of longitudinally clamping a blank between two crimping matrices.

[0010] FIG. 3 illustrates a bullet with an extractor in the shape of an aerodynamic needle.

[0011] FIG. 4 illustrates the ammunition cartridge with muzzle wads and a bullet having an extractor in the shape of an aerodynamic needle and the ammunition in which the damage agent is further fastened with a spring.

[0012] FIG. 5 illustrates a multi-bullet ammunition cartridge, with bullets fastened through the bottom wads, and single-bullet ammunition cartridge.

DESCRIPTION OF THE INVENTION

[0013] The object of the present invention is to remove the above drawbacks, namely, to develop an inexpensive relatively simple method for producing a bullet suitable for different kinds of targets and having low aerodynamic resistance, and also to develop an ammunition (cartridge) in which this bullet is used.

[0014] In order to achieve this object, a method for producing an arrow-shaped bullet includes the steps of deforming the rear part of a tubular blank to create the aerodynamic empennage (tail section, or tail fins) and inserting a core inside the front part of the tubular blank. The core is inserted in the tubular blank before its deformation. The core is fastened inside the blank by a simultaneous deformation of the front and rear parts of the blank. The deformation is carried out by pressing the blank walls without altering the thickness thereof.

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central portions. The surfaces of the bullets' tail sections fit into the wad's openings, and the bullets' tail sections protrude beyond the wad's forward boundary and are inserted into the propelling charge's material.

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